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In the last office action, Examiner maintained the restriction requirement and made it final. Thus limiting the claims to variant described in unamended claim element 14(e). Note, that this variant is now described in amended claim 14(a) and set forth in SEQ ID NO: 9.

Subsequent to receiving the office action, the undersigned sought the counsel of Cecilia Tsang of the PTO, who is a biotechnology specialist with respect to unity of invention issues. It is the understanding of the undersigned that after some discussion between the Examiner and Ms. Tsang, both agreed that it would be proper to examine groups V to VIII together. These groups refer to those delineated by the Examiner in the restriction requirement of December 30, 2002.

Appellants gratefully acknowledge the efforts of Examiner and Ms. Tsang in agreeing that groups V-VIII be examined.

In response, claim 14 has been amended to delete sequences that were allegedly anticipated by US '809 to Cech et al. Thus, the instant amendment overcomes the prior art.

The table below summarizes the current status of the claim elements in of original and unamended claim 14 (a) to (h).

<u>EFFECT OF THE ISDN AND UNAMENDED CLAIMS ON THE SEQUENCES RESTRICTED IN ORIGINAL CLAIM 14</u>	
a) SEQ ID NO: 12	(not present in original claim 14)
b) DNA sequence of the 5' flanking sequence of the gene	(not present in original claim 14)
c) DNA sequence of the 3' flanking sequence of the gene	(not present in original claim 14)
d) SEQ ID NO: 13 (lacking 5' flanking sequence)	(not present in original claim 14)
e) Amended ► claim 14(a), SEQ ID NO: 9.	
f) Amended ► claim 14(b), SEQ ID NO: 10.	
g) Amended ► claim 14(c), SEQ ID NO: 12.	
h) Amended ► claim 14(d), SEQ ID NO: 11.	

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In addition to the prior art rejections, the Examiner issued rejections under §112, 1st paragraph due to the allegedly inadequate specification. For the most part, these rejections derived from errors in the previously submitted sequence listing.

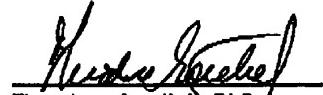
In response, an amended sequence listing and Response to the Notice to Comply, was mailed on June 6, 2003. Appellants believe, in good faith, that the submission of June 6, 200, provides the correct sequences and overcomes the written description rejections. Said amended sequence listing did not introduce new matter, because all of the sequences had been originally filed.

It is believed that the claims are in condition for examination on the merits, and are in fact, in condition for allowance.

The undersigned again gratefully acknowledges the efforts of Examiner and Ms. Tsang in agreeing to examine the claims as amended.

Respectfully Submitted,

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MARK UP OF AMENDED CLAIMS

14. (Amended) An isolated and purified nucleic acid sequence selected from the group consisting of:

- a) a nucleic acid sequence encoding the protein of SEQ ID NO.: 2;
- b) a nucleic acid sequence encoding the amino acid sequence of the catalytic telomerase subunit of *Eupotes p123* which is functionally equivalent to the protein of SEQ ID NO.: 2;
- c) a nucleic acid sequence encoding the amino acid sequence of the catalytic telomerase subunit of yeasts which is functionally equivalent to the protein of SEQ ID NO.: 2;
- d) a first variant nucleic acid sequence of SEQ ID NO.: 1, wherein nucleotides 2345 to 2526 of SEQ ID NO.: 1 have been deleted;
- a e) a second variant nucleic acid sequence of SEQ ID NO.: 1, as described by SEQ ID NO: 9, wherein nucleotides 2184 to 2219 of SEQ ID NO.: 1 have been deleted;
- b f) a third variant nucleic acid sequence of SEQ ID NO.: 1, as described by SEQ ID NO: 10, wherein nucleotides 2184 to 2219 and 2345 to 2526 of SEQ ID NO.: 1 have been deleted;
- c g) a fourth variant nucleic acid sequence of SEQ ID NO.: 1, as described by SEQ ID NO: 12, wherein nucleotides 3219 to 3842 of SEQ ID NO.: 1 have been replaced by another sequence so that nucleotides 1783 to 3872 have the sequence of SEQ ID NO.: 7; and
- d h) a fragment variant of SEQ ID NO.: 1 as described by SEQ ID NO: 11 consisting of nucleotides 60 to 3470 of SEQ ID NO.: 1.

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- e) a nucleotide sequence that is at least 85% identical to the sequence described in a), b), c) or d), or a sequence complementary thereof, and wherein said variant encodes for active polypeptide having telomerase activity.
- f) a sequence variant of the sequence described in a), b), c) or d) that results from the degeneracy of the genetic code, or a sequence complementary to said sequence variant, wherein the sequence variant encodes a polypeptide having telomerase activity.

15 (Amended) An isolated and purified nucleic acid sequence according to claim 14, which is a nucleic acid sequence encoding the protein having the catalytic activity of the protein of SEQ ID NO.: 2.

20. (Amended) An isolated and purified nucleic acid sequence according to claim 14, which is a second-variant nucleic acid sequence of SEQ ID NO.: 1, said variant having the sequence described in SEQ ID NO: 9, wherein nucleotides 2184 to 2219 of SEQ ID NO.: 1 have been deleted.

21. (Amended) An isolated and purified nucleic acid sequence according to claim 14, which is a third variant nucleic acid sequence of SEQ ID NO.: 1, said variant having the sequence described in SEQ ID NO: 10, wherein nucleotides 2184 to 2219 and 2345 to 2526 of SEQ ID NO.: 1 have been deleted.

22. (Amended) An isolated and purified nucleic acid sequence according to claim 14, which is a fourth variant nucleic acid sequence of SEQ ID NO.: 1, wherein nucleotides 3219

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to 3842 of SEQ ID NO.: 1 have been replaced, so that said variant has the sequence described in SEQ ID NO: 12, by another sequence so that nucleotides 1793 to 3872 have the sequence of SEQ ID NO.: 7.